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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,029	08/02/2000	Laszlo Arato	60705-1320	8405
7590 09/08/2005 Thomas Kayden Horstemeyer & Risley LLP 100 Galleria Parkway Suite 1750 Atlanta, GA 30339			EXAMINER AHN, SAM K	
			ART UNIT 2637	PAPER NUMBER

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/632,029	ARATO ET AL	
	Examiner	Art Unit	
	Sam K. Ahn	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment, 06/17/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 17-43 and 46-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-29 and 48-58 is/are allowed.
- 6) ☒ Claim(s) 1, 13, 14, 17, 18, 30, 42, 43, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 2-12 and 31-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see p.21, filed 06/17/05, with respect to the rejection(s) of claim(s) 1,13-14,30 and 42-45 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Krishnan et al. USP 5,809,070 and Terry et al. USP 6,327,264 B1 (Terry).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,13,14,17,18,30,42,43,46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. USP 5,809,070 (Krishnan) in view of Terry et al. USP 6,327,264 B1 (Terry).

Regarding claims 1,13,30 and 42, Krishnan teaches a communication system (see Fig.3A) comprising: a customer computer (10) configured to supply an upstream data transmission and receive a downstream data transmission; and a plurality of modems (12,14) in communication with the customer computer via a first data transmission link (a link from the lower

modem in Fig.3A to the host,10), the plurality of DSL transceivers in communication with a respective modem at a central office (via 16,18) via respective transmission lines, wherein each of the plurality of DSL transceivers is configured to receive a downstream data stream and to transmit and upstream data stream, the upstream data transmission configured for distribution across the plurality of modems, the plurality of modems further configured to generate the downstream data transmission from the plurality of downstream data streams (note col.4, lines 34-43).

Krishnan further teaches the plurality of DSL transceivers in communication with each other via a plurality of DSL transceiver data transmission links (links connecting between modems 12 and 14, and note col.4, line 37-38 wherein three modems may be in the daisy chain).

Krishnan also teaches wherein serially connected transceivers (12 and 14 in Fig.3A) are in communication with each other (note col.4, lines 34-43).

Although, Krishnan does not explicitly teach wherein the modems are DSL transceivers, it would have been obvious to one skilled in the art at the time of the invention to implement using DSL modems for the purpose of further increasing the data rate, wherein DSL lines are known to support higher data rate than analog lines.

However, Krishnan does not explicitly teach wherein the customer computer has a customer interface.

Terry teaches wherein the customer computer (14 in Fig.3) is coupled to a customer interface (30), and further suggests that the customer interface

may be a permanent part of the customer computer (note col.6, lines 59-63). Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the teaching of Terry in the system of Krishnan by including the customer interface as a permanent part of the customer computer for the purpose of saving cost and also reducing cable connections, such as connecting the network connection from a computer to the network interface.

Regarding claims 14,17,18,43,46 and 47, Krishnan in view of Terry teach all subject matter claimed, as applied to claim 13 or 42. Krishnan further teaches wherein the transceivers are communicating with a predetermined remote transceivers in the central office side (through 16 and 18 in Fig.3A). Although Krishnan in view of Terry teach having an interface, does not explicitly teach having a first and second data interface.

However, it would have been obvious to one skilled in the art at the time of the invention to analyze that one skilled in the art may have a separate interface for receiving from transmitting, thus having first and second interface for the purpose of implementing designated interface for transmitting and receiving, thus reduce and simplify processing amount for each transmitting and receiving interfaces.

Allowable Subject Matter

3. Claims 19-29 and 48-58 are allowed.

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4. Claims 2-12 and 31-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn
9/6/05

TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER
9/6/05